

Amendments to the Specification:

Please replace the paragraph at page 2, lines 16-29, with the following paragraph:

-- High fidelity polymerases alone should definitely increase fidelity rates but usually do not amplify long fragments as efficient as a DNA polymerase lacking a 3'-5' exonuclease activity (e.g., Taq DNA polymerase). Enzyme mixtures that combine a standard polymerase with a small amount of proofreading polymerase may provide a balance between fidelity and yield. A study published in 1994 illustrated that the use of a high level of a DNA polymerase lacking 3'-5' exonuclease activity (an exo^- DNA polymerase, KlenTaq-1) with a very low level of a thermostable DNA polymerase exhibiting 3'-5' exonuclease activity (an exo^+ DNA polymerase such as Pfu, Vent, or Deep Vent) generated products with increased base-pair fidelity with a maximum yield of 35 kb DNA from 1 ng of lambda DNA template (Barnes, Proceedings of the National Academy of Sciences, 91:2216-20, 1994). Similarly, U.S. Patent Nos. 5,436,149 and [6,008,205] 6,008,025 disclosed methods for improving DNA amplification fidelity using a DNA polymerase composition comprising a first enzyme substantially lacking 3'-5' exonuclease activity and a second enzyme comprising 3'-5' exonuclease activity. In mixtures such as these, the exo^+ enzyme acts to correct polymerization errors produced by the exo^- DNA polymerase. --

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